

## REMARKS

Applicant respectfully requests reconsideration of this application as amended. Claims 1, 5-6, 17-19, 25-26 and 30 have been amended. Claims 4, 10-16, 20-24 and 28 has been cancelled without prejudice. No new claims have been added. Therefore, claims 1-3, 5-9, 17-19, 25-27 and 29-30 are presented for examination. The following remarks are in response to the final Office Action, mailed October 11, 2006, and the advisory action mailed, December 6, 2006.

### 35 U.S.C. § 103 Rejection

Claims 1-3, 5-9, 17-20, 25-27 and 29-30 stand rejected under 35 U.S.C. §103(a), as being unpatentable over Matyas, Jr. et al., U.S. Patent No. 6,687,375 (“Matyas”) in view of Chen, et al., U.S. Patent No. 6,182,220 (“Chen”), further in view of Hardy, et al., U.S. Patent No. 6,073,242 (“Hardy”), and further in view of Menezes, et al. “Handbook of Applied Cryptography”, (“Menezes”).

Claim 1, as amended, recites:

A method comprising:

initializing a pseudo-random number generator (PRNG);

obtaining local seeding information from a host;

securely obtaining remote seeding information from remote entropy servers via a secure entropy collection protocol, the remote seeding information to be mixed with the local seeding information to perform one or more of providing an unpredictable system status, amplifying entropy, and enhancing system security;

repeating the securely obtaining of the remote seeding information for each entropy server;

generating a key pair including a temporary asymmetric public key and a temporary asymmetric private key;

encrypting the temporary public key with a public key associated with a remote entropy server;

decrypting the temporary public key with a private key associated with the remote entropy server;

encrypting the remote seeding information with the temporary public key;

decrypting the remote seeding information with the temporary private key;  
and  
stirring the PRNG via the local seeding information and the remote  
seeding information.  
(emphasis added)

As an initial matter, Applicants respectfully disagree with the Examiner's characterization of the references and Response to Arguments even when the cited references are "considered as a whole." (Office Action, mailed 10-11-06, pages 6-7) However, for the sake of expediting issuance of this case, Applicants provide additional remarks for the Examiner's consideration. Matyas discloses a "computer program which generate[s] a cryptographic key utilizing user specific information to generate a user dependent key." (Abstract). Matyas further discloses "*a PRNG . . . for generating pseudo random numbers. [T]he PRNG having only one secret seed value.*" (col. 9, lines 19-25; emphasis added). Chen discloses "[a] method . . . for *communicating encrypted user passwords from a client to a server.*" (Abstract; emphasis added). Chen further discloses that "[t]he server *communicates to the client a server random seed value.* The client then *generates a client random seed value* and, using both the client random seed value and the server random seed value, an encrypted user password. The client then *communicates to the server the client random seed and the encrypted user password.* Then the server validates the encrypted user password using both the server random seed and the client random seed." (col. 2, lines 1-9; emphasis added).

Hardy discloses "[a]n electronic communication authority server that provides centralized key management, implementation of role-based enterprise policies and workflow and projection of corporate authorities over trusted networks." (Abstract). Hardy further discloses that "*a secure connection is a connection where the level of confidentiality, authentication, and integrity is sufficient* for the purposes of the system

owners and users.” (col. 3, lines 54-56; emphasis added). Menezes discloses that “a session key is an ephemeral secret, i.e., one whose use is restricted to a short time period such as a single telecommunications connection, after which all trace of it is eliminated.” (page 494, lines 3-5).

In contrast, claim 1, as amended, in pertinent part, recites “initializing a pseudo-random number generator (PRNG) . . . obtaining local seeding information from a host . . . securely obtaining remote seeding information from remote entropy servers via a secure entropy collection protocol, the remote seeding information to be mixed with the local seeding information to perform one or more of providing an unpredictable system status, amplifying entropy, and enhancing system security” (emphasis added). Matyas, Chen, Hardy, and Manezes, neither individually nor when combined in any combination, teach or reasonably suggest at least these features of claim 1. Accordingly, Applicants respectfully request the withdrawal of the rejection of claim 1 and its dependent claims.

Claims 17 and 25 contain limitations similar to those of claim 1. Accordingly, Applicants respectfully request the withdrawal of the rejection of claims 17 and 25 and their dependent claims.

### **Conclusion**

In light of the foregoing, reconsideration and allowance of the claims is hereby earnestly requested.

### **Invitation for a Telephone Interview**

The Examiner is requested to call the undersigned at (303) 740-1980 if there remains any issue with allowance of the case.

### **Request for an Extension of Time**

Applicant respectfully petitions for an extension of time to respond to the outstanding Office Action pursuant to 37 C.F.R. § 1.136(a) should one be necessary. Please charge our Deposit Account No. 02-2666 to cover the necessary fee under 37 C.F.R. § 1.17(a) for such an extension.


### **Charge our Deposit Account**

Please charge any shortage to our Deposit Account No. 02-2666.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

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